IN THE ABSTRACT

Please replace the heading as follows:

ABSTRACT OF THE DISCLOSURE

Abstract

Please replace the abstract as follows.

The invention relates to aA radiation shielding arrangement for shielding high-energy neutron radiation and gamma radiation from high-energy particle accelerators or storage rings. The radiation shielding arrangement according to the invention contains includes a shielding element made of water-containing material, for example with chemically bound water or water of crystallization, in particular gypsum. The water component of the material preferably makes up at least 5, 10 or 20 per cent by weight. The hydrogen nuclei or protons contained therein moderate neutrons in a virtually ideal manner because of the almost identical mass and the maximum pulse transformation associated with this.